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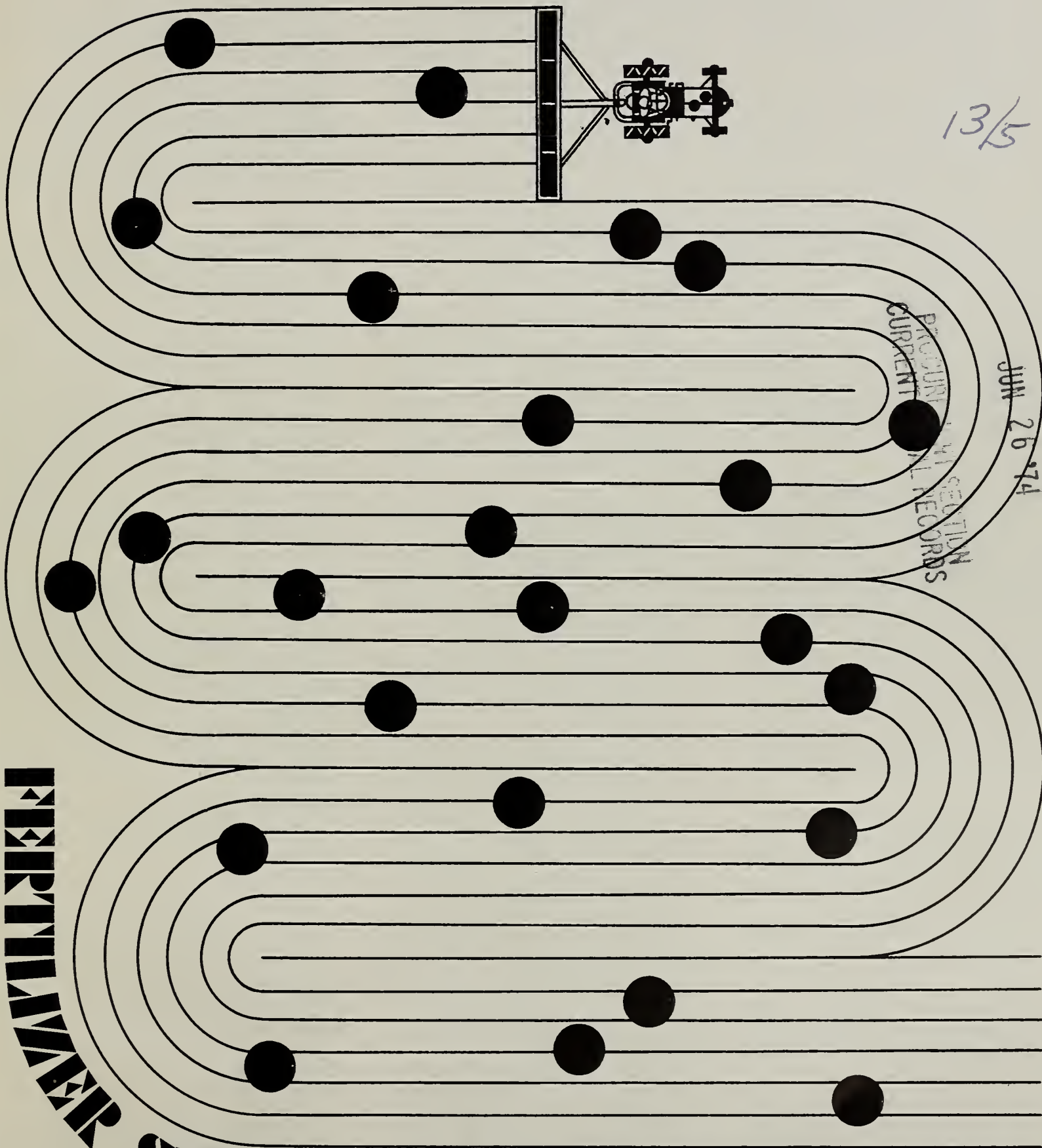
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THE FARM INDEX

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FERTILIZER SHORTAGE...HOW BAD IS IT?

Late spring and early summer are expected to usher in higher livestock prices as production retreats from winter levels. Retail prices will probably follow suit but not match the highs recorded in February.

Fed cattle prices are expected to rise into the mid-\$40's per hundredweight early this summer after plunging from near \$50 in January to the low \$40's heading into May.

Livestock experts cite February's truck strike as the main cause of erratic prices earlier this year. Deteriorating market conditions during February and March discouraged orderly marketing of slaughter cattle, with heavy, over-finished cattle clamping a lid on prices.

More cattle will be coming to slaughter this summer and fall, and prices should weaken but generally run above recent lows. Average slaughter weights should be down too, as most overfinished cattle should be marketed by then.

Barring further disruptions for the rest of 1974, beef output this fall could edge up from last year, but remain below the record level of 1972. Favorable fed cattle prices this spring and summer should spur placements on feed over last year's total.

Cows and nonfed steers and heifers, will supply much of the increase in slaughter this fall. Also, stepped-up beef imports during second half 1974 should boost domestic beef supplies.

Hog prices plummeted early this year but should gather strength later this spring and summer as supplies trend seasonally lower. Summer prices may peak in the high \$30's—still well below last year when weekly averages pushed \$60 per hundredweight for a brief period.

Summer slaughter supplies come mostly from pigs born in December-February, when farrowings usually range at their lowest levels of the year. Hog producers in the 14 major hog States had the same number of sows farrow as the previous winter, but the smaller-than-average number of pigs per litter pared the pig crop 3 percent.

Even so, autumn should bring larger

Catching Up

We ate less in 1973—but indications are that we'll nearly catch up this year.

Per capita consumption dipped 1½ percent in 1973 from the record set for total food consumption in 1972. This year, we're expected to again be eating at near 1972 levels, though consumption of livestock products will continue below 1972 heights.

A spotcheck of what's expected for this year shows—

Red meat consumption will regain nearly half of the 13-pound drop from the 189 pounds of 1972. About three-fourths of this gain will be in beef, with the additional beef coming about equally from increases in production and imports.

Fish consumption should be at record-high levels. Last year, per capita consumption rose 2½ percent to 12.6 pounds per person, and a similar gain is expected this year, primarily for low-priced items such as fish sticks and fillets of ocean perch, turbot, and whiting.

Poultry consumption is expected to jump back to around the record set in 1972. Chicken consumption will probably be slightly below the record 43 pounds per person of 1972, while turkey will probably reach a new high.

Dairy consumption is projected to be steady, with sharply reduced consumption of butter offset by more use of cheese and low-fat fluid milks.

Per capita consumption for fats and oils is estimated at 54 pounds for 1974, slightly more than last year. Higher use of margarine, shortening, and cooking and salad oils will more than offset decreases in butter and lard use. Soybean oil in food products is running at record levels.

Total fruit consumption is expected to be at the highest level in 14 years primarily reflecting higher consumption rates for citrus fruit. Consumption of frozen orange juice concentrate is likely to rise sharply again this year.

Vegetable consumption may be up slightly, but all of this would probably be in fresh use. Canned vegetable stocks are down and will probably hold consumption of processed vegetables down until the new pack becomes available this summer and fall.

hog slaughter and some easing of prices.

An uneven market dominated the lamb picture during first quarter 1974, though prices averaged near year-earlier levels. For the rest of the year, experts see no major price shifts—a repeat of last year's stable price situation.

For milk production, it's still a downhill course. Output in first quarter 1974 totaled nearly 28 billion pounds, off 3 percent from 1973. Only the Mountain and Pacific regions posted increases.

On the brighter side, output per cow during March finally topped year-earlier rates for the first time in over a year.

Production is expected to remain below year-earlier levels into third quarter 1974, but could move ahead late this year. By that time, feed supplies and prices should prove more attractive to dairymen. And improved milk-feed price ratios may well put milk output per cow back on its long upward curve.

Farm milk prices in April averaged 38 percent over a year ago, reaching \$8.86 per hundredweight. They'll continue above a year ago, despite seasonal declines during the summer months.

Better milk prices lifted cash receipts from dairying some 30 percent during first quarter 1974—despite smaller milk marketings. Gross dairy income will advance again in 1974—to as much as \$9½ billion.

On the retail side, dairy prices continued to climb, with March prices topping year-earlier figures by 25 percent. Biggest gainers were American process cheese, evaporated and fluid milk. Further—but smaller—price increases are in store for the rest of the year.

Look for a good supply of fresh spring vegetables. Except for potatoes, none of the 14 major spring vegetables will experience serious shortages, even though acreage—and expected output

—may be off 5 percent from last year.

Fresh vegetable imports — largely from Mexico—are ranging near the record flow of 1973. Bigger shipments of melons, peppers, and cucumbers are generally offsetting reduced movement of tomatoes and onions.

Pickings are slimmer for processed vegetables. Supplies are the smallest in years, and prices have crept up steadily since the start of the selling season. Prices for the upcoming 1974 pack may head even higher—reflecting stepped-up raw product and packing costs.

Frozen vegetables could pick up some of the slack. Off-season packing of broccoli, carrots, and spinach in California has considerably brightened supply prospects. Stocks as of April 1 stood a full 25 percent larger than the same time last year.

But despite the easier supply situation, wholesale prices for most frozen vegetables are holding higher than a year ago.

Record prices and strong demand underscore the potato picture. Current stocks are off 9 percent from last year's depressed level. And prices probably won't be softening too much until after Labor Day when the important fall harvest begins.

Sweetpotato acreage, according to latest planting intentions, will be up 5 percent—the makings for a 6-7 percent bigger crop.

Dry bean growers aren't missing out on record high prices either. They're upping their acreage by about 20 percent. This could spell one of the biggest crops in years, and bring current shortages to a grinding halt.

After a slow start, egg production is expected to pick up and pass 1973 levels. At 16 million cases, output in March ranged somewhat below last year's total, as an increased rate of lay failed to offset reduced layer numbers.

Egg-type hatchery figures show more pullets entering the laying flock through mid-year. The rate of lay should hold up as well.

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BLACK MIGRATION IN THE RURAL SOUTH



Blacks have left the rural South in great numbers over the past 2 decades, but the latest population census shows signs, albeit faint, of a return of successful blacks to rural areas in southern States.

Twenty years ago, George Jones left his small home town in the South because he couldn't find a good job.

He moved to Chicago, and he moved up. A successful economist with the Government today, he's thinking about retiring 10 years or so from now. And he's thinking about home.

The last population census showed faint signs of other blacks like George who have made it in the city and are retiring to the country, often back home.

Just the beginning. One ERS specialist in demography believes this is just the beginning. In many cases, this is the first generation of blacks to have the wherewithal—through adequate pension plans at work—to actually plan a retirement spot.

The ERS demographer feels the South is definitely going to see a gradual return of successful blacks to rural areas, just as the national trend is toward more people staying in or returning to the countryside.

That's not to say, though, that this will come anywhere near offsetting the tide of young blacks leaving the rural South. Nor will the number of blacks retiring to rural areas be as extensive as that of whites—at least not in this decade.

Millions have left. Over the past 2 decades, nearly 3 million blacks—mostly young—have left the rural South on a net basis. The main reason was the lack of jobs.

Agriculture, the biggest employer of blacks in the South, has changed greatly. Of the three biggest crops, cotton is now about 99 percent machine harvested; peanuts are increasingly harvested by machine; and tobacco production is being streamlined. The result is a decreased need for labor, especially for blacks.

It's been a different story for the

white population in the South.

During the 1950's, nearly 3 million white people left small towns and rural areas of the South . . . compared with about 1½ million blacks.

But during the 1960's this outmigration dropped 95 percent for whites. On a net basis, only 123,000 whites left the rural South in that decade . . . compared with 1.3 million blacks.

One factor: employment. Part of the explanation for this may lie in the fact that while nonagricultural employment is growing in the rural South, it tends to be benefiting the white segment of the population, not the black.

Census figures showed that in predominantly black Wilcox County, Alabama, for instance, blacks saw employment in agriculture—their main industry—plummet nearly 80 percent during the 1960's. Non-agricultural employment for blacks, meanwhile, dropped 3 percent.

But for the white population, non-agricultural employment rose 40 percent. And the white outmigration reversed itself in the 1960's.

Fairly typical. While this was the most extreme of four agricultural counties looked at, the others also experienced similar situations that seem reasonably typical of the agricultural regions of which they are a part.

These counties had up to 60 percent of their black adult population leaving each year over the past 2 decades, with no signs that it let up any in the 1960's.

Whether this situation arises because the economic improvements are simply not sufficient to attract blacks to stay as opposed to the lure of the cities, or whether the blacks have not had the same access or eligibility for the new nonagricultural economy is not known.

Chicago bound. Most blacks who leave the rural South move to cities in the North or West. Chicago is a major destination, and 7 out of 10 blacks who moved there from the South from 1965 to 1970 came from rural areas, mainly in Mississippi.

School Days

One out of every 4 Americans between the ages of 3 and 34 is enrolled in school.

And where they live and what race they are have a lot to do with just how long they stay enrolled.

For instance, an ERS report shows that in 1970 about 10 percent of the Nation's 16 to 17 year olds were not enrolled in school.

But in metropolitan areas, this percentage was lower—about 9½ percent—while in nonmetropolitan areas it was considerably higher—more than 13½ percent of the 16 to 17 year olds were school dropouts.

For minorities, it was half again as high—15½ percent nationwide. And for minorities in nonmetropolitan areas, nearly 1 out of 5 who were 16 or 17 years of age were not enrolled in school compared with the national average of 1 out of 10.

[Based on special material from David L. Brown, Economic Development Division.]

New York and Los Angeles had a smaller proportion of southern black residents coming from rural areas. About 56 percent of those settling in Los Angeles came from nonmetro areas in the South.

Los Angeles' low proportion of nonmetro migrants is partly derived from the prominence of Texas as a source State, for Texas has a large metro black population.

As this decade goes on, there's yet another area that could have some effect on black migration in the South: black political power.

A few rural counties in Alabama, Georgia, and Virginia have a majority black population now in political control. They're seeking to change local government policies that have worked against them in the past. Such actions could possibly result in fewer blacks leaving southern rural areas.

[Based on "Migration Patterns of Minorities in the United States," by Calvin L. Beale, Economic Development Division, in the *American Journal of Agricultural Economics*, December 1973.]

Nationwide, Median Years Of Schooling Climbs to 12; Rural Areas Lag

Over the past decade, we've added another year and a half to the "average" person's education.

The median number of years of schooling now stands at slightly over 12 for persons 25 years of age or older, according to data ERS derived from the 1970 Census.

However, in totally rural counties, the median number of school years completed was a full 2 years behind the 1970 national average. And the percentage of college graduates in these areas was less than half the national average. About 1 in 20 persons who were 25 years of age or older were college graduates in these rural areas compared with the 1970 national average of better than 1 in 10. In the fringe counties of greater metropolitan areas, nearly 3 out of 20 persons 25 years of age or older were college graduates.

In a more generalized breakdown on just metropolitan and nonmetropolitan counties, ERS found metro counties about matched the national median of years of schooling for adults, but nonmetro areas were about 1 year short.

However, all areas showed gains during the past decade. While the national median was up 1½ years, metro counties were up 1 year and nonmetro areas, up nearly 2 years from 1960 when the median number of years of schooling held by adults in nonmetro counties was slightly more than 9 years.

Among regions, the median years of school completed in 1970 was highest in the West—nearly 12½ years—and lowest in the South—11.3 years.

Among metro and nonmetro counties by regions, the median number of years of schooling for persons 25 years of age or older ranged from a high of 12.4 years in the metro counties of the West to 9.9 years in the southern, nonmetro counties.

[Based on special material from David L. Brown, Economic Development Division.]

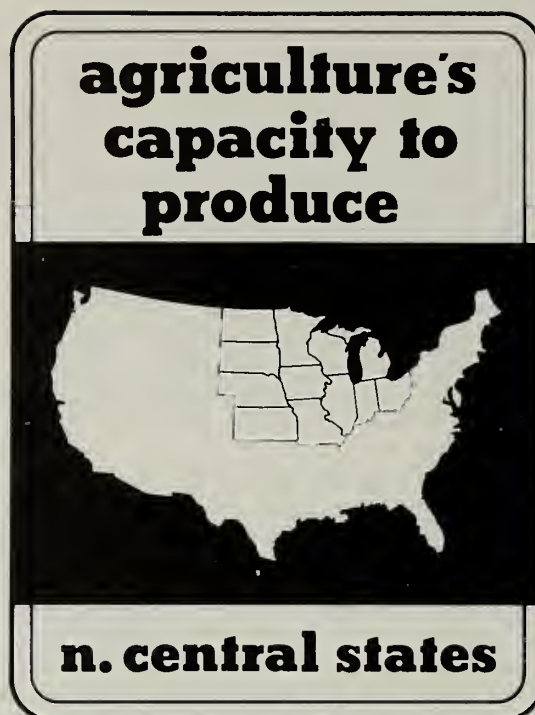
The Corn Belt, the Lake States, and the Northern Plains are the focus for this latest regional report based on ERS's projections of American agriculture's capacity to produce to the year 1985.

In no region in the U.S. is there more likely to be a tight supply of cropland in the next 10 years or so than in the Corn Belt.

Judging from projected demand for food and fiber till 1985 and a high export assumption, the Corn Belt may well need more cropland than it has readily available, particularly for corn and soybeans. This could force a shift in production among crops there . . . and possibly among other regions of the country.

This comes out of ERS's latest regional study on agriculture's capacity to meet demand to the year 1985.

For the U.S. as a whole, however, projected cropland either "in hand" in 1985 or readily available—needing to be plowed or cleared—will exceed projected demand by some 3 to 18 million acres over the 1973 level, depending on the export assumption.



Twelve States. This latest study covers 12 North Central States and includes the Corn Belt—Ohio, Indiana, Illinois, Iowa, and Missouri; the Lake States—Michigan, Wisconsin, and Minnesota; and the Northern Plains—North Dakota, South Dakota, Nebraska, and Kansas.

Altogether, these North Central regions planted more than 206 million acres in 1973 in crops and har-

vested 187 million acres. For 1985, they are projected to have readily available 221 million acres that could be planted if demand was high and commodity prices favorable, and these would yield about 207 million harvested acres. This amounts to a 7-percent rise in planted acreage from 1973 to 1985.

Close to past peaks. These three North Central regions are somewhat unique in that they are closer to using their peak crop acreages than other areas of the country. Taking the Corn Belt's peak in World War I, the Northern Plains' peak in 1954, and the Lake States' in 1935, the top acreage these States have used for crops is 220 million acres. They used 94 percent of this last year while the rest of the continental U.S. averaged 72 percent of its historical high.

Taking into consideration projected demand for agriculture and its capacity to produce to 1985 and distributing this by region according to historical trends and comparative advantages, the study found—

—The North Central States are projected to produce a larger portion

THE U.S. AND THE NORTH CENTRAL STATES' AGRICULTURAL PRODUCTION, 1970-72 AND 1985

	1970-72 Average			1985 Projections				
	U.S.	N. Central States	N. Central States' Share of U.S. Production	U.S.	N. Central States	N. Central States' Share of U.S. Production	U.S. 1985 As Percent Of U.S. 1970-72	N. Central States 1985 As Percent of N. Central States 1970-72
	Millions		Percent	Millions			Percent	
Wheat	1,105 bu.	897.3 bu.	59.6	1,528 bu.	879 bu.	57.5	101.5	97.9
Rye	38.6 bu.	29.3 bu.	75.9	43.3 bu.	28.2 bu.	65.1	112.2	96.2
Corn	5,089 bu.	4,354 bu.	85.6	6,613 bu.	5,938 bu.	89.8	129.9	136.4
Grain sorghum	795.3 bu.	361.7 bu.	45.5	1,148 bu.	478 bu.	41.6	144.3	132.1
Oats	831.1 bu.	697.1 bu.	83.9	752.3 bu.	625 bu.	83.1	90.5	89.7
Barley	434.4 bu.	153.0 bu.	35.2	556.9 bu.	175.6 bu.	31.5	128.2	114.8
Hay	128.2 tons	65.4 tons	51.0	137.6 tons	71.7 tons	52.1	107.3	109.6
Soybeans	1,193 bu.	853.8 bu.	71.6	1,800 bu.	1,244 bu.	69.1	150.9	145.7
Irish potatoes	313.2 cwt.	63.0 cwt.	20.1	356.5 cwt.	69.7 cwt.	19.6	113.8	110.6
Dry beans	1,711 lbs.	900.0 lbs.	52.6	1,451 lbs.	821 lbs.	56.6	84.8	91.2
Cattle, calves	40,020 lbs.	17,983 lbs.	44.9	55,051 lbs.	25,139 lbs.	45.7	137.6	139.8
Hogs	22,174 lbs.	17,554 lbs.	79.2	27,484 lbs.	23,033 lbs.	83.8	123.9	131.2
Sheep, lambs	1,051 lbs.	325 lbs.	30.9	407 lbs.	140 lbs.	34.4	38.7	43.1
Chickens, except broilers	1,173 lbs.	291 lbs.	24.8	1,452 lbs.	235 lbs.	16.2	123.8	80.6
Turkeys	2,297 lbs.	970 lbs.	42.2	3,381 lbs.	1,592 lbs.	47.1	147.2	164.1
Eggs	69,400	18,643	26.9	75,484	15,909	21.1	108.8	85.3
Milk	118,640 lbs.	56,505 lbs.	47.6	118,850 lbs.	56,560 lbs.	47.6	100.2	100.1

of the Nation's corn, turkeys, and hogs by 1985.

—Out of 17 selected commodities, the North Central States are projected to reduce their production of 7 of them by 1985: wheat, rye, oats, dry beans, sheep, chickens, and eggs. In the U.S. as a whole, production is projected to go down for only 3 commodities: oats, dry edible beans, and sheep.

—Out of 10 selected crops, the North Central States are projected to harvest more acres in 1985 for corn and soybeans than they did for 1970-72 but harvest fewer acres for the other 8 crops: wheat, rye, grain sorghum, oats, barley, hay, potatoes, and dry beans. This differs from the projection for the U.S. as a whole in that harvested acreages for corn, soybeans, rye, grain sorghum, and barley are projected to go up.

—The greatest reservoir of land that could be converted rapidly to crop production in the U.S. is probably in the Northern Plains. USDA's Conservation Needs Inventory of 1967 shows the Plains has 28 million acres suitable for cropland but not in crops, with about 22 million acres of this in pasture or rangeland.

—Altogether, the three North Central regions have a reservoir of some 81 million acres not now in crops that could potentially be converted to cropland, according to the inventory. This includes 25 million acres in the Corn Belt and 28 million acres in the Lake States. However, much of the 81 million acres is in small sections, in forest, or in pasture supporting the beef industry. Thus, the economics of it suggest that only a part will be brought into production in any given year, and only with substantial investment and with prices high enough to get farmers to convert it to cropland. Projecting to 1985, ERS sees about 15 million of these acres being converted to crop production in the North Central States, with about 10 million of this needed for crops under the "low" export assumption.

Cropland changes. Over the past 25 years, land taken out of crop

production in the three North Central regions has averaged 500,000 acres annually, offset in recent years by an annual average of 540,000 acres of newly developed cropland, such as from clearing brush and plowing pastures.

In projecting the 15 million-acre addition to the cropland base by 1985, ERS assumed that the rate of cropland lost to urbanization or diverted to forest, pasture, and rangeland will slow down and that there will be enough of an increase in cropland being reclaimed or developed to add about 1.2 million acres a year to the cropland base. This assumes that farm prices will be such as to encourage farmers to convert more acreage to cropland.

In addition to these projections, which use admittedly conservative agricultural export estimates, ERS looked at agriculture's capacity to produce under much heavier export demand . . . and found the North Central States would fall short of enough cropland to maintain its share of production.

Feed grains and soybeans. The North Central States are heavy producers of the feed grains and soybeans that make up the bulk of U.S. farm exports, and in projecting heavier export demand, the study focused on these two commodities. For feed grains, the U.S. export level was set at 56.3 million metric tons by 1985 as opposed to 34.5 under the more conservative assumptions and 30.6 million metric tons of soybeans compared with 25.8 million.

The "optimistic" export conditions include (1) continued movement toward freer trade and (2) a comparative advantage for the U.S. in international trade of food and fiber commodities.

To meet the greater demand projection would require nearly 15 million more harvested acres in the U.S., about two-thirds in feed grains.

North Central's share. For the North Central States to produce the same share of U.S. production in 1985 as it would under the more conservative assumptions, they would

need about 8 million more harvested acres for feed grains and 3 million more harvested acres for soybeans. And this exceeds their estimated productive capacity for 1985 by about 5 million acres.

The U.S. as a whole can meet the higher export demand levels. This would, however, probably require some shifting among regions as to the commodities they produce, and it would require favorable prices for feed grains and soybeans to provide the incentive for the increased production.

[Based on *Agricultural Production, Yield, and Acreage Projections to 1985 for Three North Central Regions*, compiled by Virden L. Harrison, National Economic Analysis Division.]

Smaller Supplies Color The Orange Picture

Within a year or so you may be wondering where the orange went.

According to a recent ERS study, per capita supplies of both fresh and processed orange products will slide in 1974/75 and may not recover to current levels until the late 1970's.

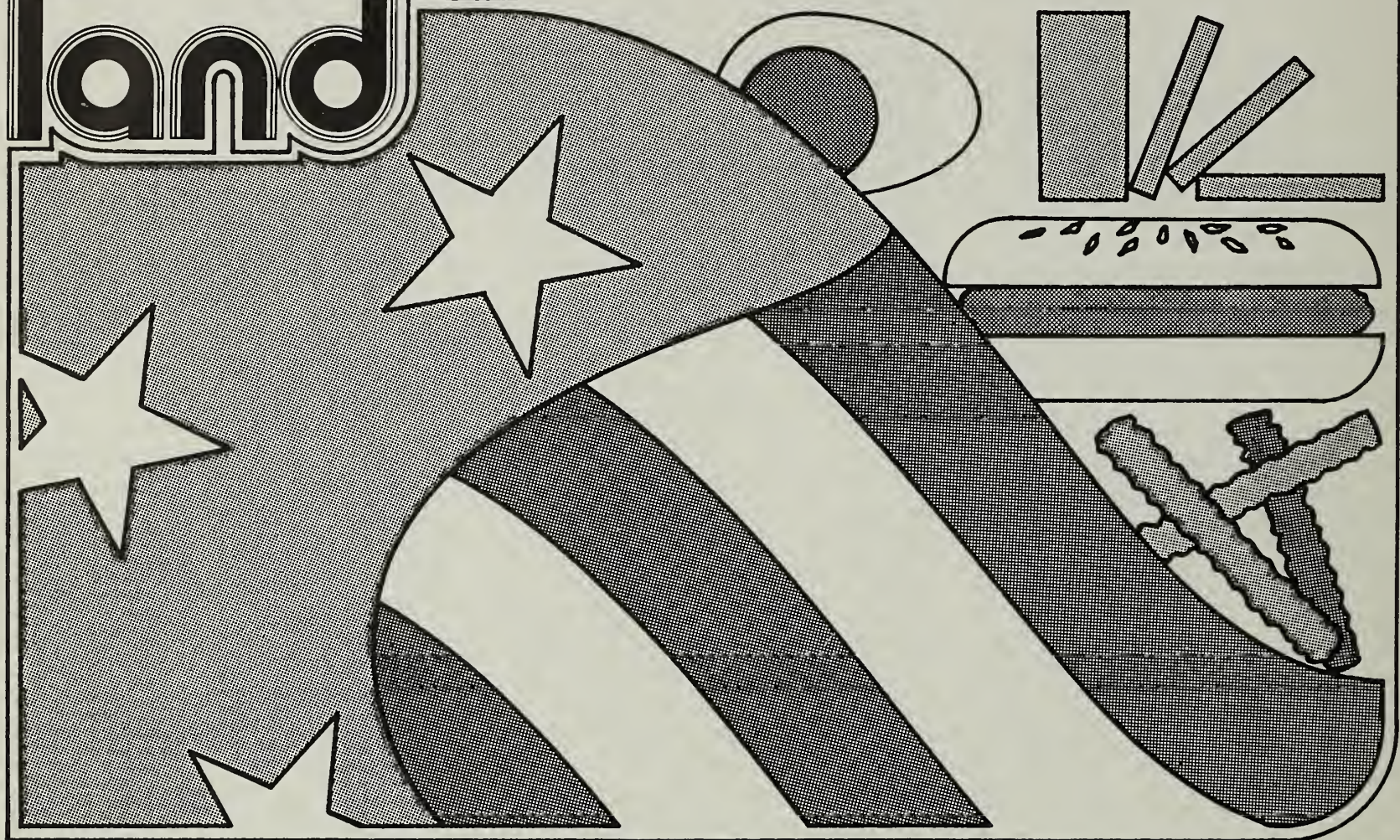
Meanwhile, we can expect "significant increases" in orange prices in the 1974/75-1979/1980 period as the demand for orange concentrate mounts up.

Smaller supplies with higher prices will be the offshoot of a reduction in plantings of new orange trees in recent years, especially in Florida. Reason for the slowdown in plantings was a drop in producers' prices and profits in the late 1960's when orange production outraced growth in demand. By 1980, however, Florida's acreage of bearing trees should be back to the high levels of 1970/71.

In developing the projections, the ERS study took into account the likely changes in consumer disposable incomes, wage rates, prices of competing products, and orange yields per acre.

[Based on "The U.S. Orange Economy: Demand and Supply Prospects 1973/74 to 1984/85," *Fruit Situation*, TFS-190, February 1974, by Jim L. Matthews and Abner Womack, National Economic Analysis Division, and Ben W. Huang, Commodity Economics Division.]

fats of the land



Whether they realize it or not, Americans are eating more fats, and over half the intake is in "invisible" fats, like those in meat, poultry, and dairy items.

Calling the U.S. a nation of fat-eaters hardly sounds like a compliment.

Nonetheless, with the exception of last year, Americans have continued to put away sharply increasing amounts of food fats since the mid-1960's.

Greater use of food fats partly reflects our changing eating habits—in time, place, and frequency of eating. Convenience and snack foods have proliferated. And the ballooning

of fast-food franchises has opened a booming market for fats and oils.

In the early 1970's each person ate around 127 pounds of food fats per year ("visible" and "invisible" kinds), versus only 114 pounds in 1961. Last year, however, the per capita share of "invisible" fat shrank about 2 pounds, reflecting reduced meat consumption.

Top three. Roughly nine-tenths of the nutrient fat in the U.S. diet comes from three major food groups—fats and oils; meat, poultry, and fish; and dairy products.

In analyzing total American fat intake, researchers divide consumption into so-called "visible" and "invisible" categories. We've been eat-

ing more of both.

The "visible" kinds—butter, lard, margarine, shortening, cooking and salad oils—accounted for about 43 percent of total fat intake last year. Use of visible food fats jumped from about 45 pounds (fat content basis) per person in 1961 to over 53 pounds in 1973. The gain was marked by major shifts—away from butter and lard to more margarine, shortening, cooking and salad oils, for example.

Use of "invisible" fats made up 57 percent of total fat intake last year. The invisibles include dairy products (other than butter), eggs, animal products, various fruits, vegetables, and cereals.

Consumption of invisible food fats

stood at 75 pounds per person in 1971—up from 69 pounds in the early 1960's. Most of the gain came in fats from meat, poultry, fish, and game, which surged from 39 to 46 pounds per person.

The fat intake from these products has since dropped to about 43 pounds. And fat in dairy products—excluding butter—retreated from around 17½ pounds per person in the early 1960's to 16 pounds in recent years.

Mounting use of vegetable oils is the main reason why U.S. diets are richer in nutrient fats than a decade ago. The per capita share provided by animal fats has trailed off because the higher fat intake from stepped-up meat consumption only partly offset precipitous drops in butter and lard use.

Despite the waning use of animal fats, this group continues to provide about a fourth of our total calories. And while calories from vegetable fats have risen, animal products still account for the biggest share of all calories derived from fats.

Oils take command. Twenty years ago, the food fat market was split about half and half between edible vegetable oils and animal fats—lard, butter, and edible beef fats. Since then, per capita use of vegetable oils has shot up from 22 to 42 pounds, while consumption of animal fats plunged from 22 to 11 pounds. By last year, vegetable oils had four-fifths of the market.

Edible oils came to the forefront mainly because of—

- ✓ increased soybean oil output at competitive prices;

- ✓ stepped-up use of hydrogenation, allowing shortenings to be made entirely of vegetable oils;

- ✓ consumer shifts from butter to lower-priced margarines; and

- ✓ dietary shifts from solid (saturated) fats to liquid (unsaturated) oils.

Soybean oil has emerged as the leading vegetable oil in the U.S. after accounting for only a fifth of fats and oils used 2 decades ago. Soybean oil now makes up more than half of a 75-percent larger market.

Last year, soybean oil accounted for 79 percent of the fats and oils going to make margarine, 73 percent of those used in salad and cooking oils, and 58 percent of the fats and oils used in shortenings.

Salad and cooking oils paced the increase in use of food fat products. Their volume tripled from around 1.2 billion pounds per year in the early fifties to 3.8 billion pounds last year. Meantime, per capita use sailed from 7 to 18 pounds.

More to come. This year, use of food fats and oils is expected to reach 12 billion pounds—about 5 per-

cent over last year. The trend toward less butter and lard will gather steam while edible oils' share of the market will continue to climb.

Soybean oil will extend its lead as the major edible oil—to perhaps as much as 57 percent of the food fat market. And use of food fats is expected to edge up about half a pound per person—with salad and cooking oils leading the way.

[Based on "U.S. Food Fat Consumption Trends" by George W. Kromer, Commodity Economics Division, appearing in *Fats and Oils Situation*, FOS-272, April 1974.]

ALDRIN BAN WOULD BE COSTLY TO FARMERS

A ban on aldrin, the leading insecticide for corn production, would add millions to farmers' costs and possibly to the price of food paid by consumers.

Under the most severe conditions studied, farmers with insect problems could have lost up to \$56 million in 1971, and added costs to consumers could have mounted to as much as \$75 million.

These estimates come from a recent ERS study, one of a series to determine the economic consequences of restricting the use of certain farm pesticides.

In 1971 an estimated 10 percent of total corn acreage was treated with aldrin to control northern corn rootworms, wireworms, and cutworms. This was down from 20 percent in the mid-1960's when the insecticide was applied extensively to control the northern corn rootworm and the "soil insect complex."

The ERS study said the decline in aldrin's use may be partly due to the fact that western corn rootworms spread eastward and some soil insects developed resistance to the insecticide.

Of the more than 7½ million acres treated with aldrin in 1971, 4.4 million or 59 percent were in Illinois and Iowa, but Missouri led other States in the share of its corn acreage treated with aldrin, 32 percent.

Nationwide, the report said, a ban

on aldrin would result in lower corn yields and higher prices to farmers assuming they did not increase planted corn acreage. These higher prices would lift the income of corn farmers as a group and they would raise the cost of food to consumers. In 1971 the additional growth in food costs would have come to over \$12 million when alternative insecticides were used, and nearly \$75 million when alternatives were not used.

However, those farmers actually using aldrin would have had their incomes lowered by almost \$32 million in 1971 if they switched to alternatives and about \$56 million if they did not.

In the event farmers decided to plant more land to corn in an effort to maintain output, production costs would have risen some \$26 million when alternative insecticides were used and around \$32 million in the absence of replacements.

Corn prices have about doubled since the 1971 survey. Thus a prohibition on aldrin for corn production in the immediate future could have a greater economic impact than these figures suggest, according to the economist who made the study.

[Based on manuscript by Herman W. Delvo, National Economic Analysis Division, entitled *Economic Impact of Discontinuing Aldrin Use in Corn Production*.]



How well will the world eat tomorrow?

By most indications the world's food output will keep growing fast enough to keep up with population increase. Thus for the foreseeable future the world will eat at least as well as it does today. This year's production is likely to break all records as nations press to maximize farm output and rebuild depleted stocks.

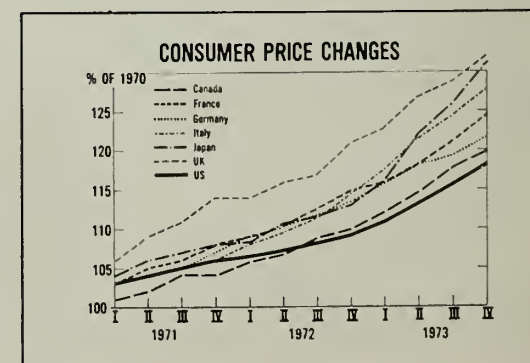
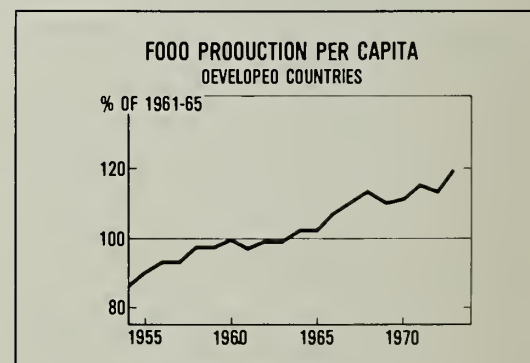
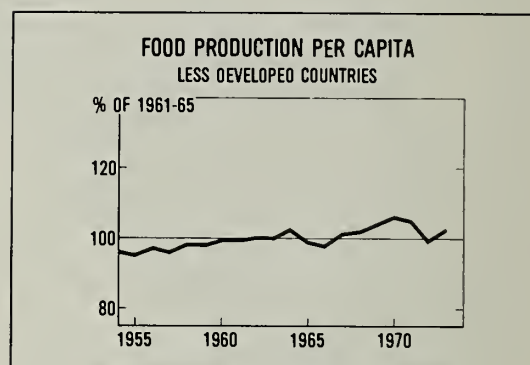
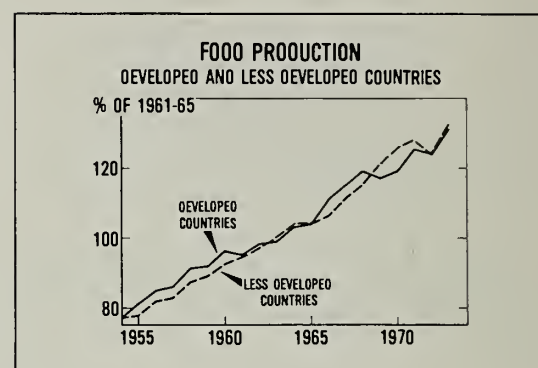
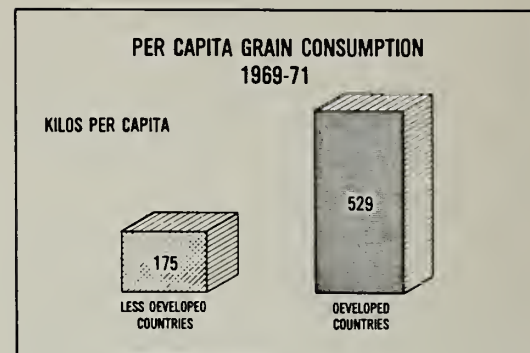
But severe problems lie ahead in making this food available and affordable to everyone. By 1985 there will still be the haves and the have-nots . . . with pockets of starvation and serious malnutrition.

This is graphically illustrated by per capita grain consumption. Today it is much greater in developed nations, where about four-fifths of the grain is consumed indirectly through livestock foods. In poor nations, most grain is used directly as food. By 1985, grain use may rise a fifth in developed nations, again because of meatier diets, but projected improvements in the less developed nations are small indeed.

Food output in both the developed and less developed countries advanced by an annual average of 3 percent over the past 20 years. While farm output has been on the rise, so has people production. More than 45 million are born each year in nations unable to feed themselves adequately, and they account for over four-fifths of the annual growth in global population. These people have just about eaten up food production gains in the less developed world.

Farm and food prices are expected to remain high compared to the levels of the 1960's and early 1970's but they will be lower than the current peaks. To most Americans the current rates of price inflation seem excessive. Yet many other countries have even greater inflation problems.

[Based on speech by Quentin M. West, ERS Administrator, entitled "How Well Will The World Eat Tomorrow?" to seminar on "Expanding Trade in Agricultural Products: Prospectives for the Pacific Northwest," Oregon State University, Corvallis, Ore., April 18, 1974.]



ERS Traces Flow of Nation's Water Pollution Laws

Concern about water pollution—a product of the sixties?

Not at all, says a new ERS report that chronicles the development of Federal water pollution laws.

According to the study, the Federal Government first got involved with clean water enforcement when it passed a statute in 1886 to control dumping of waste material into New York Harbor. Three years later, the Rivers and Harbors Act forbade dumping into any navigable waterway without permission of the Army Corps of Engineers.

The early laws aimed more at protecting ships from floating obstacles than regulating water quality. But after the turn of the century, researchers focused their attention on the health hazards posed by impure water.

The Public Health Service Act of 1912 called for nationwide standards for the treatment of drinking water and better methods of sewage disposal. The act also laid the groundwork for Federal-State cooperation in pollution control efforts.

Until 1948, legal authority to enforce water pollution controls belonged entirely to State and local governments. Authority shifted increasingly to State levels, however, when local governments found they had no control over the discharge of pollutants upstream.

The Water Pollution Control Act of 1948 came in response to a dramatic surge in water pollution that accompanied the rapid growth of wartime industry. This law provided for Federal loans to finance research programs and water treatment plants, but acknowledged that enforcement of clean water regulations still rested primarily with the States.

Since the mid-fifties, the framework for pollution control has been increasingly determined by Federal legislation. Steadily declining water quality and a need for stronger Federal enforcement eventually gave rise to the Federal Water Pollution Control Act Amendments of 1972.

The amendments directed the Environmental Protection Agency (EPA) to establish effluent limitations, issue industrial and municipal discharge permits, and set up a timetable for cleaning up our water.

The laws authorize \$24.6 billion to be spent over the next 3 years. Most—about \$18 billion—will be in Federal grants to help local governments construct sewage treatment plants.

The EPA will apply effluent limitations at each identifiable point from which pollutants are discharged. Industries, including food processors, are required to adopt the “best practicable” pollution control technologies by July 1, 1977, and the “best available” technologies no later than July 1, 1983.

Plants that discharge into municipi-

pal facilities will have to meet pretreatment standards and pay their fair share of municipal operating costs. Discharge of pollutants without an EPA-approved permit will be unlawful after December 31, 1974.

Not all firms will be able to invest in pollution control technologies or use municipal waste treatment facilities. Some may be forced out of business.

Nonetheless, researchers emphasize that the adverse economic impact of water pollution controls can be minimized with careful planning and Federal assistance in developing treatment facilities and other means to curb water pollution.

[Based on *Historical Guide to Federal Water Pollution Control Laws Affecting Food Processing*, ERS-543, by Peter M. Emerson, Commodity Economics Division.]

Survey Probes Way To Extend Doctor Services

Not all shortages these days involve energy. Shortages of doctors plague many areas and have led officials to seek ways of extending physician services to places where they're most scarce.

One possibility is the use of “physician extenders.” Though not full M.D.'s, physician extenders are trained medical professionals such as nurse practitioners and medics. In areas where doctors' services are scarce, they could handle some routine medical tasks, thus freeing doctors to concentrate on more difficult cases.

But will people accept physician extenders? Not long ago, an Arkansas research team decided to find out.

In 1970, half the population of Arkansas was classified as rural. And rural areas typically have inadequate health facilities, a chronic shortage of physician specialists, and numerous residents who can't afford the high cost of illness.

Survey takers asked some 4,000 Arkansas residents if they would be willing to use physician extenders

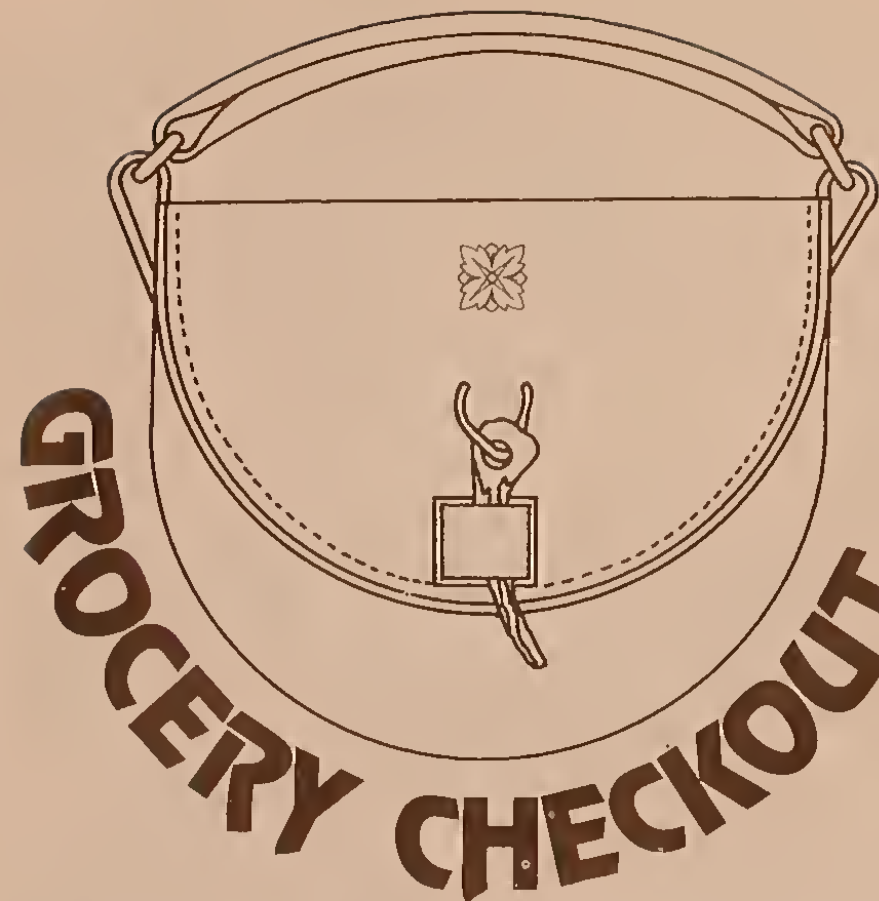
(PE) for minor illnesses and routine checkups. In rural areas, 73 percent indicated they would, compared with 65 percent in urban centers.

Acceptance of PE proved greatest among younger groups—76 percent among household heads under 35 years of age. The share who said they would use PE declined as age increased. Only 63 percent of the 65-and-over group were willing.

Survey results showed that the more educated respondents tended to be less receptive to the idea of extenders. Highest levels of acceptance were recorded among the least educated.

Also, proportionately more blacks than whites said they would use PE. And heads of households with five or more members were less reluctant than single-member households—78 vs. 64 percent. Willingness to try physician extenders varied only slightly with family income levels.

[Based on manuscript, *Would Arkansans Accept Physician Extenders*, by John F. McCoy, Arkansas Health Statistics Center; Bernal L. Green, Economic Development Division; and Mary Jo Grinstead, University of Arkansas.]



Food prices being what they are, many a shopper wonders what he is paying for at the supermarket. ERS looked into the matter, and here are some of the findings.

By the time the supermarket adds all its costs and profits to the grocery tab, you wind up paying almost a fifth more than what the food costs at wholesale. That extra fifth is the price of convenience—being able to buy products at the time, at the place, and in the quantity and form we want them.

By far the biggest slice of a retail store's operating margin goes for labor, in 1972 accounting for over half of the total margin of 17.5 cents to the sales dollar.

After-tax profit of the typical supermarket turns out to be a relatively small piece of the package—less than a penny to the sales dollar.

Distant second. A distant second to labor costs is advertising and promotion at just under 2 cents. Next

is rent with about 1½ cents. All other cost components of the retail store margin, such as paper products, repairs, and fuel and electricity, are less than 1 cent each, or 5 percent, of the store margin.

As expected, this study by ERS found that marketing costs and margins for different products vary widely, inasmuch as products differ in form and composition and require different handling and processing. Not only is this true for retailing, but for the processing, wholesaling, and the transportation necessary to bring the products to the retail store.

Tab for processing. Processing or packing costs are a relatively small proportion (less than a fifth) of the retail price for 11 of 19 items studied. Among the 11 are beef, pork, milk, butter, broilers, eggs, fresh oranges, apples, potatoes, and lettuce. In contrast, processing costs make up around half the retail price of applesauce, french fries and catsup.

Of the processing margin, as distinct from the retailer's margin, the biggest cost component for 11 products is labor, while packaging costs are the biggest cost component for 8 items, which include eggs, canned and frozen orange juice, canned tomatoes, catsup, and french fried potatoes. Labor and packaging account for nearly half to two-thirds of the processing margin for almost all products studied. Most of the

**LABOR
PACKAGING
ADVERTISING
RENT
PROFITS
ENERGY
OTHER COSTS**

\$.17

WHERE THE MONEY GOES

Groc

Meat

Deli

Prod

Costs of shipping meat, dairy products, broilers, and eggs—which are high in value in relation to their weight and volume—account for only 2 to 3 percent of the retail selling price. Shipping costs for fresh fruits and vegetables, on the other hand, are 10 percent or more of the retail price.

For a better idea of marketing costs and margins, and where your food dollar goes, here are some examples by specific commodities studied.

Choice beef. The retail price in 1972 averaged out to \$1.14 a pound. This meat at the farm had a value of about 72 cents. Add to that the cost of selling and transporting the live animals (1.3 cents), processing (5.3), wholesaling (8.9), and retailing (25.8) to arrive at the retail price.

As shares of the total retail price, the farmer got 64 percent; the livestock trucker and broker only 1 percent; processor 5; wholesaler, including transporter, 8; and retailer 23.

Eggs. Retail price for grade A or AA large was a bit over 52 cents a dozen in 1972, of which the farmer got 29.9, the assembler 0.8, the packing plant 7.6, the wholesaler 3.4, and the retailer 10.7.

Compared to beef, the farmer's share of the retail price was somewhat less—57 percent—as was the retailer's share, averaging 20 percent. The packing plants' share of the retail price was higher than for the processor of beef, 15 percent, due in large measure to the cost of cartons and packaging materials for eggs.

Orange juice. Of the retail price—slightly over 49 cents for a 46-ounce can of single strength juice—the farmer and retailer again received a smaller proportion than for either eggs or beef, and the processor's share increased. The farmer got 28 percent, the processor 39, the wholesaler 14, and the retailer 19. The actual margins in 1972 were: farm value (13.8 cents), processing (19.2), wholesaling (6.7), and retailing (9.6). By far the largest

Need To Know

Accelerated inflation over the past couple of years, with rapid rises in food prices, has put the food price issue at center stage. Increasingly, shoppers are asking what their food dollar is going for.

Congress wanted the answer also, and requested ERS to do research that would yield more information on the cost and profit components of food processing and retailing margins.

A special ERS task force was assigned to the project. The findings of their investigation are summarized on these pages.

component of the processing margin (10.1 cents) represented the cost of the can and packing materials.

California iceberg lettuce. The farmer got the least of anyone. His share of the retail price of 43 cents a head was only 9 percent, whereas the harvester and field packer received 14, the wholesaler 37, and the retailer 40. Farm value was 3.7 cents, harvesting and field packing 6.3, wholesaling 15.8, which includes 6 cents for transportation, and retailing 17.2.

White bread. The 1972 retail price averaged close to 25 cents for a 1-pound loaf. The American wheat farmer got 2.8 cents, assembler 0.4, flour miller 0.6, transporter 0.3, processor 7.2, wholesaler 8.8, and retailer 4.6. Their percentage shares of the retail dollar were: farmer 11, assembler 2, miller 2, transporter 1, processor 29, wholesaler 36, and retailer 19.

Retail prices of some of the items studied—broken down among the costs of marketing functions and farm value—are shown in the table on page 14. More detailed data on the components of these margins are available in the complete report by writing to The Farm Index.

[Based on "Costs and Profits Comprising Farm-Retail Spreads for Selected Foods," *Developments in Marketing Spreads for Agricultural Products in 1973*, Commodity Economics Division and National Economic Analysis Division.]

Cost-Conscious Shopper Shouldn't Write Off Convenience Foods

"I could make it from scratch for half the price." How many times do you say that to yourself as you eye the convenience foods at your local grocery?

But could you really save half the price?

On some items, yes. On others, convenience foods may prove to be more economical than if you bought the fresh product and fixed it at home.

ERS conducted a survey in early 1973 of food prices charged by a major retail chain in Washington, D. C. The survey team found that, on the average, 59 percent of the selected convenience foods had a per-cost serving equal to, or less than, comparable foods in fresh form

or prepared in the home.

Among vegetables, 7 in 10 ready-to-cook items had a lower cost per serving than their fresh counterparts. Frozen green beans, for example, ran 8.1 cents a serving versus 8.9 cents for fresh beans. Frozen cut corn cost 8.5 cents compared with 15.2 cents for fresh cut corn.

Frozen french fried potatoes were 4.7 cents a serving against 10 cents for home-prepared potatoes. Dehydrated mashed potatoes were 3.7 cents versus 5.5 cents for the home-prepared product.

Frozen orange juice was only one-third the cost of the same serving of fresh orange juice . . . bottled lemon juice, one-fifth as much as fresh juice.

Of baked goods, 75 percent of the convenience products had higher costs than home prepared.

Slightly over half the pork, beef,

chicken, and turkey convenience foods were less expensive per serving, due in part to the fact that meat from a carcass is used more efficiently by the processor.

A similar study made in 1960—in four metropolitan areas over a 12-month period—showed that of 158 convenience foods, 116 were found to be more costly than their home-prepared counterparts. But the less expensive convenience foods more than offset the more expensive ones. In a \$100 purchase pattern for food in grocery stores, convenience foods accounted for \$14.03. The equivalent amount of fresh or home-prepared items would have cost \$15.10.

[Based on "Convenience Foods Revisited—A Progress Report," a speech by Larry G. Traub, National Economic Analysis Division, presented at the Food Production Development Symposium Workshop, Michigan State University, March 11-12, 1974.]

WHERE THE MONEY WENT FOR SELECTED FOOD PRODUCTS IN 1972

Food item	Farm value ¹	Marketing functions					Retail price
		Assembly and pro- curement	Process ing	Intercity transpor- tation	Wholesal- ing	Retail- ing ²	
		Cents					
Beef, Choice (pound)	72.5	1.3	5.3	.9	8.0	25.8	113.8
Pork (pound)	47.9	1.5	14.9	.9	2.0	16.0	83.2
Milk, sold in stores (½ gallon)	29.4	2.2	9.9	³	11.8	6.5	59.8
Butter (pound)	63.8	2.3	5.5	1.3	2.5	11.7	87.1
Broilers (pound)	20.1	1.3	6.3	1.6	3.7	8.4	41.4
Eggs, grade A or AA large (doz.)	29.9	.8	7.6	1.6	1.8	10.7	52.4
Apples (3-pound bag)	27.3	2.5	14.9	5.6	6.3	23.5	80.1
Oranges, California (dozen)	32.1	1.5	16.7	10.3	9.3	52.1	122.0
Tomatoes, Florida (pound)	13.4	.5	4.9	3.0	11.5	17.2	50.5
Lettuce, California (head)	3.7	.3	6.0	6.1	9.7	17.2	43.0
Potatoes (10-pound bag)	38.6	⁴	18.0	12.3	9.1	35.4	113.4
Orange juice, frozen concentrate (6-ounce can)	8.2	.5	6.5	1.1	3.2	5.5	25.0
Tomato catsup, California (14-ounce bottle)	5.3	.7	13.2	2.8	3.3	5.1	30.4
Bread, white (1 pound)	2.8	.4	⁵ 7.6	⁶ .3	⁷ 9.0	4.6	24.7

¹ The farm value is the gross return to farmers for the quantity of farm products equivalent to the unit sold at retail minus imputed value of byproducts. ² In-store costs only. ³ Included in wholesaling. ⁴ Included in farm value. ⁵ Flour milling and bread baking. ⁶ Flour only. ⁷ Includes bakers' wholesaling and delivery costs.

PROCESSING COSTS accounted for less than a fifth of the retail price for 19 food items, according to an ERS review of 1972 costs. Costs of transporting goods from processing or packing plant to a wholesaler or retail store varied widely, depending on perishability, bulkiness, and the distance food products are shipped. They ranged from only 2

or 3 percent of the retail price for meat, dairy products, broilers, and eggs, to 10 percent or more for fresh vegetables. For all food items studied, retail store margins ranged from 10 to 43 percent of the retail price, but were clustered around 20 percent. Labor costs accounted for 50 to 60 percent for most items. (See related story on page 12.)

Skillful at Teaching Advanced Farming Techniques? Try Tanzania

To the rest of the world, it's the country where the new gemstone tanzanite was found, where the Leakeys have discovered much about early man, and where you can still see African wildlife in abundance.

But to Tanzania's 14 million residents, 9 out of 10 of whom live on farms, it's a rural country where subsistence agriculture predominates.

One of the biggest blocks to modernizing its agriculture is simply the scarcity of skilled people to teach more advanced farming methods, a forthcoming ERS report points out.

Little mechanization. Most farmers raise about five or six crops, including one or two cash crops, on small, inherited farms of 3 or 4 acres. Mechanization is at a very low level—the common tool is the hoe.

Aside from subsistence agriculture, there are a few hundred plantations of 1,000 acres or more which are generally more capital intensive. Most are privately owned and most raise sisal. All told, they hire about 110,000 people, or less than 2 percent of the labor force.

This East African country's agricultural production has risen at an average annual rate of about 2.8 percent since 1954, barely matching the population growth rate.

Government aid. In trying to boost production, the government has ex-

panded extension services, is extensively reorganizing the marketing system, and has subsidized the use of fertilizers, pesticides, and improved seeds.

In addition, the country has encouraged the establishment of *Ujamaa* farming. A Swahili word meaning familyhood, *Ujamaa* is a form of Tanzanian socialism conceived by President Julius K. Nyerere. *Ujamaa* villages are cooperative societies where everything from producing and marketing crops to developing and managing public services is done communally.

The number of such villages climbed sevenfold in 3 years, reaching 5,600 in March 1973, and the number of villagers quadrupled to more than 2 million, or 1 out of every 7 Tanzanians.

Virtually self-sufficient in agriculture, farm products account for about 75 percent of Tanzania's export trade, about 10 percent less than they did 10 years ago.

Variety of exports. Unlike many other African countries, Tanzania has a highly diversified export trade. Coffee and cotton account for more than 30 percent of total export value,

cloves from Zanzibar account for about 11 percent, cashews for 8 percent, sisal for 7 percent, and tobacco, tea, and pyrethrum also add substantially to export trade.

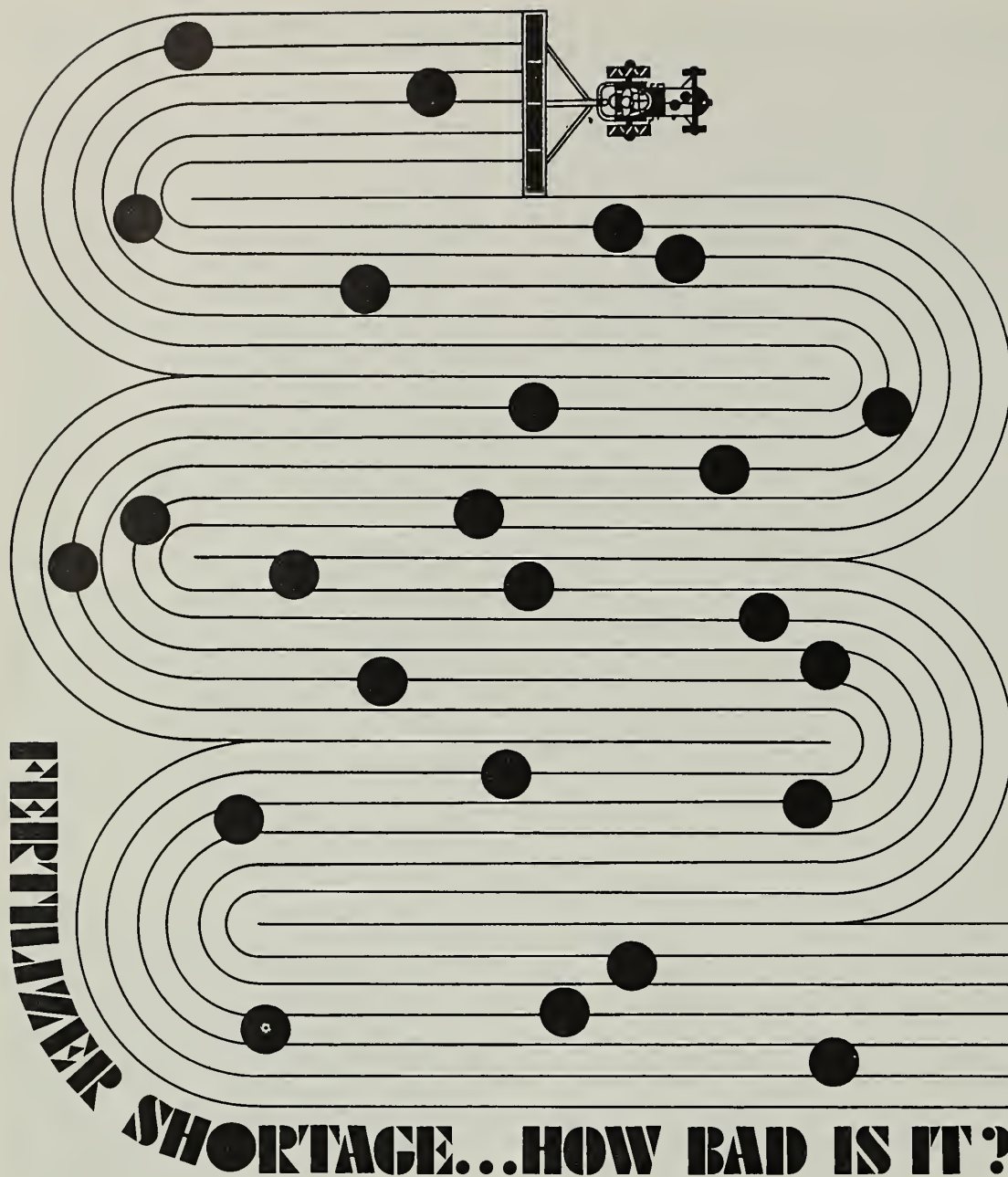
In its agricultural trade with the U.S., Tanzania's imports have varied greatly. For instance, poor corn harvests caused Tanzania to import about \$4 million in U.S. cereal grains in 1971 and 1972, compared with less than \$300,000 worth in 1969.

Coffee tops U.S. imports. Most of Tanzania's exports to the U.S. are farm products. Coffee heads the list, and other imports include pyrethrum, sisal, cloves, cashews, vegetable oils, and spices used in perfumes and pharmaceuticals.

[Based on manuscript, *Tanzania's Agricultural Economy in Brief*, by Brian J. Pritchard, Foreign Demand and Competition Division.]

One of Tanzania's up-and-coming crops is cashews—pyramided up in the picture below. At right, in southern Tanzania, a settler's wife husks maize.





"Spotty" best describes the fertilizer shortage of 1974. As for the years ahead, some nutrients will become more plentiful but for others the situation is iffy.

While many farmers are not hurting from the fertilizer shortage, for others the situation is critical.

Data compiled by USDA covering 15 key States show total fertilizer shipments were a third larger in July 1973-February 1974 than in the same 8-month period a year earlier. Yet many farmers in these States report they can't get all the fertilizer they need.

In a report sent to Congress in April, ERS fertilizer experts said: "With shortages in spite of increased shipments, some retailers, farmers

or others, must be getting considerably more fertilizer than they received last year at this time.

"The flow of fertilizer through distribution channels from manufacturer to dealer to farmer apparently has changed from earlier years during surpluses . . ."

Shopping around. ERS gives several explanations for this spotty situation. For one, distribution patterns have shifted because a number of fertilizer dealers and farmers are "shoppers." These men consider many sources of fertilizers to get the best buy.

In years past the source selected was usually a seller who had a surplus and was willing to cut his price to move the product. Now that fertilizer is harder to get, the bargain hunters have lost their old suppliers,

and other suppliers don't look kindly on the shopper who was not a regular customer when it was a buyer's market.

Secondly, suppliers often have preferred customers who buy in volume, pay promptly, and offer other economic incentives. When supplies tighten, these customers come first.

Priorities. Thirdly, some manufacturers sell part of their production through their own retail outlets and they sell the rest to independent retailers. With sparse supplies the manufacturers may find it more profitable to market all their fertilizer through their outlets at the expense of areas formerly served by independents.

Finally, some brokers or distributors could be holding out for higher prices. Their stocks don't figure in the inventory data. What is declared shortage may be partly filled later on by fertilizer now in the hands of speculators.

On a national scale, ERS has estimated the nitrogen deficit to be around 450,000 tons in the 1974 fertilizer year (July 1, 1973 to June 30, 1974), and the phosphate deficit at around 840,000 tons. Potash supply is in relatively good shape, with availability rising in line with demand—about 7 percent.

The nitrogen shortfall averages out to approximately 5 percent. With nitrogen production straining at plant capacity, and net exports down, net domestic supply is estimated to increase about 7 percent. But with crop acreages and desired application rates up this year, the increase in supply is not sufficient to cover the expected increase in demand.

Thus farmers will not achieve all of their planned increase in application rates. Instead of consumption climbing to 9.3 million tons, nitrogen use may climb to only 8.9 million, or 7 percent more than in 1973. This should have "negligible impact" on yield, ERS experts believe.

Weather holds the key. With continued good weather, the effect of a 5-percent nitrogen shortfall could be more than offset.

Phosphate to spare. The phosphate deficit is much larger than nitrogen's—around 15 percent—but it too should have little impact on nationwide production. Application rates have been high in recent years as farmers worked to build up the phosphate content of the soil. Crops actually use only a portion of the phosphates applied in a given year.

If some farmers survived the fertilizer pinch this year, will the one ahead be just as agonizing?

Projections by ERS through 1980 don't hold much hope of speedy relief. That goes for nitrogen supplies and prices in particular. New ammonia plants for nitrogen production are under construction but the effect won't be felt for some time. However, things could ease up assuming (1) we become a net importer of nitrogen, or (2) manufacturers can seal long-term contracts for natural gas or natural gas substitutes can be developed.

The phosphate picture is brighter. New plants will soon be coming on-

stream. The U.S. will likely remain the world's foremost exporter of phosphate materials and a main supply source for deficit regions.

Potash situation is iffy. Current potash capacity will not meet the demand in 1980, although Canada's potash reserves are virtually unlimited and could fill world requirements if developed.

On the specifics, based on trends, we'll need from 10.4 to 10.8 million tons of nitrogen in 1980 versus 9.3 million in 1974. The effect of a 24-percent increase in nitrogen application rates on total nitrogen requirements will be offset somewhat by a possible decline of 6 to 10 percent in crop acreages.

Five new ammonia plants are either under construction or announced to be built by the end of 1975. If these very optimistic construction schedules are held, the U.S. could have 1.6 million tons of new nitrogen production capacity for the 1977 crop. Depending upon how many older plants are closed, production of nitrogen fertilizer may be near 12 million tons in 1980. This will leave us a surplus of about 10

percent, enough to ward off spot shortages.

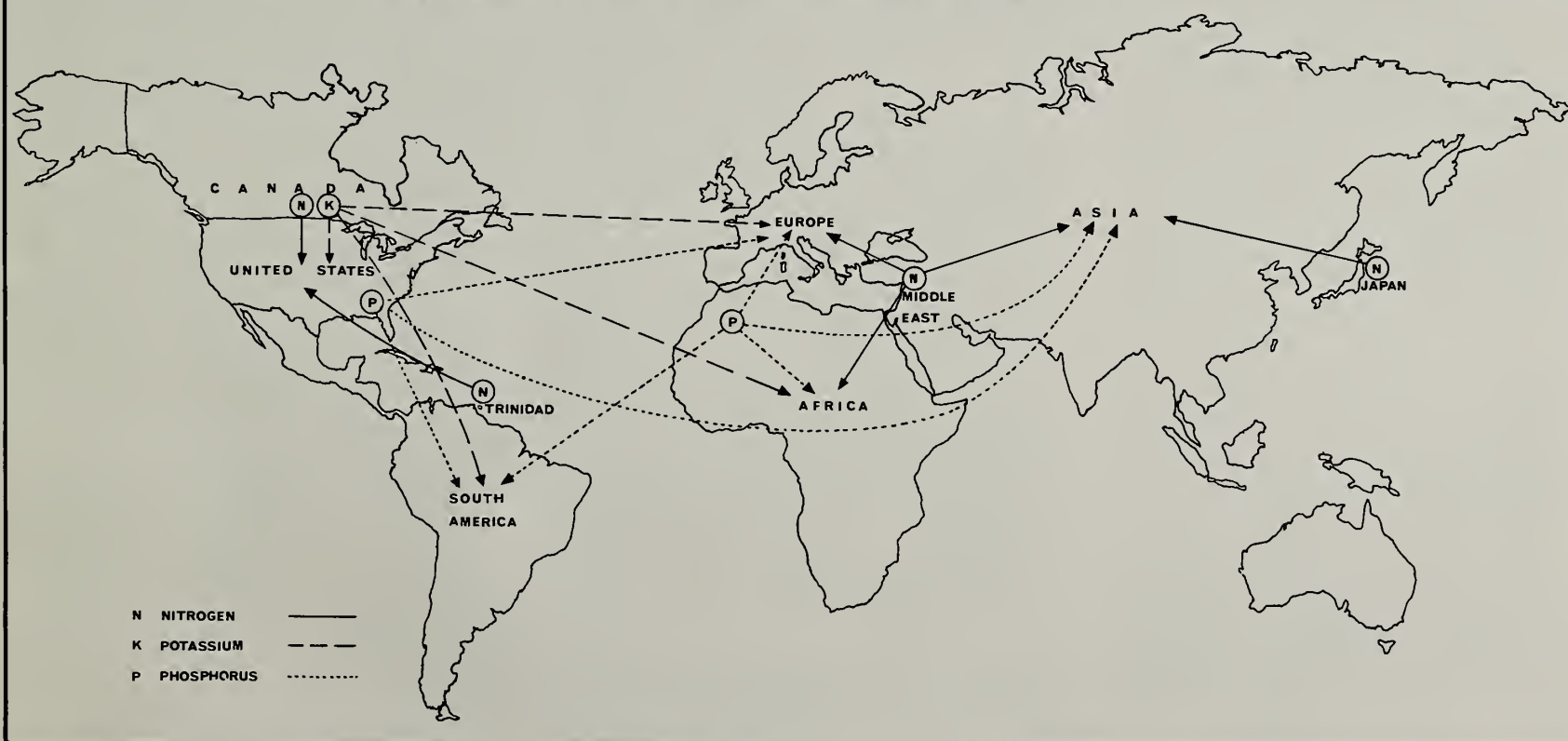
This assumes we will stop being a net exporter of nitrogen. With 18 new ammonia plants being constructed in the West Indies, Mexico, Canada and Venezuela—many by American firms—the U.S. could again become a net importer of nitrogen if domestic production is insufficient to meet demand.

Lofty nitrogen prices. Increased nitrogen supplies or not, farmers will not see the relatively low prices of a year or two ago.

The tight phosphate supply situation will loosen up as new plants begin producing. Five plants will come on-stream near the end of 1974, adding over a million tons to capacity. Another million tons are proposed for 1975, bringing total capacity to 9 million tons by the close of 1976. By 1975 or 1976, output should outstrip demand. This will make us an even more important phosphate exporter than now. Prices should begin to fall at that time.

Domestic potash production, at 3.2 million tons, is well below our consumption. With the world's largest

WORLD TRADE IN FERTILIZERS 1980



Harsh Lesson

The story behind today's high prices for fertilizer began to unfold back in the 1960's when fertilizer producers learned a harsh lesson about overexpanding plant capacities.

Before World War II, only seven U.S. firms were manufacturing anhydrous ammonia, the basic ingredient in nitrogen fertilizers. But by 1969 over 85 firms had been lured into the business by the leapfrogging demand for plant nutrients. Consumption of nitrogen in the United States increased more than 17-fold in 1940-70, phosphates 5-fold, and potash 9-fold. World fertilizer usage paralleled U.S. trends.

But by the late 1960's production capacity was outdistancing growth in fertilizer use. Fertilizer prices plummeted. In 1970 the retail price of anhydrous ammonia had dropped to half the level of the late 1950's and phosphates and potash prices by about 12 percent.

Sagging prices discouraged plants from adding additional capacity. In some cases construction was halted, older plants were shut down, and plant ownership changed rapidly.

The early 1970's saw an abrupt swing in the pendulum. Less developed countries continued to step up fertilizer use, particularly in the wake of the drought of 1972 as they drove to rebuild agricultural production. Fertilizer imports by many countries shot to record heights. The developed countries were hard put to supply the stricken nations with fertilizer, let alone to produce enough to boost food and fiber output at home.

As a result, world supply and demand for fertilizer moved back into balance much faster than expected, and prices soared.

Recalling the experience of the sixties, fertilizer producers are cautious about overexpanding in the seventies. Expansion is underway, but the effort has been frustrated by short natural gas supplies and environmental constraints.

potash reserves just across the U.S.-Canadian border, however, the U.S. should have no problem getting supplies. On the other hand, the price of potash will climb with production costs.

Cause for pessimism. The U.S. forecast of fertilizer supplies gives some cause for pessimism, especially thinking back to not many years ago when fertilizer was the rare exception to the steady advance in prices of farm inputs.

It may come as a small comfort to America's farmers that they are not alone in lamenting the changed situation. Farmers around the globe have problems. For many of them, the availability of fertilizer is the dividing line between feast and famine.

Outstripping supplies. With a few exceptions—namely, West Europe and Japan—demand for fertilizer is outracing the supply by a wide margin. The less developed countries are having to rely on costly imports for a third of their nitrogen and phosphates. Unless fertilized and irrigated, their high-yielding varieties of wheat and rice are no more productive than the traditional types.

ERS has estimated that by 1980 the world demand for nitrogen ferti-

lizer will range from 57 million tons to 64.6 million, an increase of 42 to 61 percent over 1973. Using the midpoint as the most likely demand in 1980, the known capacity will not allow production to meet this demand.

Communist Asia caught short. The region with the largest deficit will be Communist Asia, mainly the People's Republic of China. Developing Asia in general will also have a big deficit if supply is not expanded.

Several countries, such as Kuwait and Iran, are in a position to produce more nitrogen owing to their holdings of the needed natural gas. And numerous other countries are planning to expand production capacity. Even so, much of the world shortfall of nitrogen will still be in the less developed countries by 1980.

The 1980 phosphate situation is less critical than for nitrogen. Current capacity plus additions should be enough to meet demand. The principal deficit areas are developing Asia and Latin America.

Current potash capacity will not be sufficient to fill 1980 requirements, but the Canadians say they can satisfy the world demand if need be.

NET FERTILIZER SUPPLY¹

	January 1974	July - January		Change July- January '73-4/'72-3
		1973-4	1972-3	
Nitrogen (N)²		Short tons		Percent
Beginning inventory	956,470	629,739	1,019,489	
Production	1,057,545	7,548,300	7,147,590	5.6
Imports	70,080	451,046	426,074	5.9
Exports	143,711	858,616	863,838	— 0.6
Ending inventory	1,073,986	1,073,986	1,771,304	— 39.4
Net supply	866,398	6,696,483	5,958,011	12.4
Phosphate (P₂O₅)				
Beginning inventory	325,360	297,553	323,727	
Production	411,867	3,091,297	3,190,241	— 3.1
Imports	24,013	146,187	164,302	— 11.0
Exports	143,717	1,025,869	924,838	10.9
Ending inventory	319,967	319,967	454,906	— 29.7
Net supply	297,556	2,189,204	2,298,526	— 4.8

¹ Based on data from the Bureau of the Census, U.S. Department of Commerce.

² Includes nitrogen used for industrial purposes.

Domestic mines, which have already lost much of their market to Canadian sources, stand to have their share of the U.S. market reduced even further.

On worldwide reserves, ERS notes that natural gas reserves are available for producing nitrogen. Reserves of phosphate and potash are also sufficient. But reserves of these products are concentrated in specific regions. This will require substantial international trade to achieve the most efficient use of world fertilizer supplies.

[Based on *U.S. and World Fertilizer Outlook, 1974 and 1980*, AER-257, by David M. Bell, National Economic Analysis Division, and others.]

ERS Checks Out Cheese And Butter Promotion

Cheese and butter promotion . . . worth the effort? If it's cheese, the answer's an emphatic yes. For butter, prospects are less promising.

Butter and cheese are mainstays of the dairy industry, taking nearly three-fourths of all milk used in manufactured dairy products, which in turn take about half our milk production.

But from 1950-71, use of milk in manufactured dairy products plunged from about 334 to 292 pounds per person. During that time, cheese consumption managed to gain ground—though not nearly enough to offset the precipitous drop in butter use.

The loss is more acute in terms of milk equivalents. It takes about 21 pounds of milk to produce 1 pound of butter, vs. only about 10 pounds to make a pound of cheese.

To reverse this downward trend, producers are voluntarily contributing a part of their milk checks for financing research, market development, sales promotions, and other programs to improve sales of milk products.

Dairy officials asked ERS for help in determining how much of these funds should be channeled into advertising and promotion to stimulate the most sales in retail stores.

ERS cooperated by monitoring cheese and butter sales in four market areas and four additional control markets where population ranged from 400,000 to 500,000. Participating stores numbered 24-30 in each area. Sales were measured at three levels of advertising expenditures: 3-, 6-, and 9-cents per capita. Each market area was tested for five 3-month periods.

Butter sales responded only to the 9-cents per person advertising investment, rising about 6 percent or 160 pounds per supermarket annually. Sales at the 3- and 6-cent levels were no better than during periods of no advertising.

Cheese sales perked up for both the 6- and 9-cent investments, but proved no higher at the 9-cent level than the 6-cent level. The gain for both levels was roughly 15 percent, or 6,000 additional pounds per supermarket per year.

On a national basis, the 9-cent per capita butter promotion and 6-cent per capita cheese advertising could boost butter sales by more than 25 million pounds a year, and cheese sales by some 240 million pounds.

To meet this demand, dairymen would have to step up milk production by roughly 30 million cwt., with more than 80 percent going for cheese. At current prices, dairy farmers would gross an additional \$44 million for butter and \$195 million for cheese.

Producing these added revenues would drive up the annual advertising bill for butter by \$18 million and cheese by \$12 million. In other words, dairymen would pay \$3.25 per cwt. to promote butter sales, vs. only \$0.50 for cheese to meet increased demand.

Assuming farm milk prices of \$8 per cwt., dairymen would be left with \$4.75 after butter promotion, vs. \$7.50 after cheese promotion. However, the added demand would likely put upward pressure on milk prices for all uses—which would boost producers' returns.

At current prices, it's not likely that net returns to farmers over promotional costs would cover the

expense of producing the added milk required to produce additional butter.

On the other hand, efficient producers—with promotional costs of only 50 cents per cwt.—stand to improve their returns from added milk slated for cheese production.

[Based on manuscript by Peter L. Henderson, National Economic Analysis Division, titled *Sales Responses to Three Intensified Levels of Advertising and Promotional Levels for Butter and Cheese*.]

Cool Clothes for Kids

Move over, rayon and nylon—when it comes to children's clothes, cotton and cotton blends are still tops for summer.

According to a nationwide ERS survey, mothers of young children cited a blend of cotton and polyester as their preferred fabric for most of their children's warm weather garments. Ease of care and durability were the primary reasons given for this choice.

When underwear and night clothes were on the shopping list, however, the blends took a back seat to 100 percent cotton. The mothers said they chose cotton for these items because it is "cool, absorbent and comfortable." The major drawback to all cotton outerwear, they indicated, was that cotton wrinkled easily and had to be ironed.

Along this line, the mothers reported that their preferred finish for all types of children's clothes was durable or permanent press.

Depending on the garment being considered, knits and woven weaves were about equally popular with the women surveyed. However, the mothers had some definite opinions about flame resistant clothing. Not only did most of the respondents specify an interest in flame retardant fabrics, but equal numbers also added that they would be willing to pay extra for clothing treated in this manner.

[Based on manuscript entitled *Mothers' Attitudes Toward Cotton and Other Fibers in Selected Children's Clothing*, by Yvonne Clayton, National Economic Analysis Division.]

FOOD & FIBER SECTOR GENERATES NEARLY A FOURTH OF ALL BUSINESS ACTIVITY

Whether you're a farmer, processor, wholesaler, distributor, or retailer, as a member of the food and fiber team you make a weighty contribution to the Nation's economy. The food and fiber sector generates about a fifth of our Gross National Product (GNP), accounts for about a quarter of all business activity, and employs more than one in five people in the civilian labor force.

An ERS economist analyzed recently published data on the structure of the U.S. economy in 1967 and found that the food and fiber sector was directly or indirectly responsible for \$363.6 billion of that year's business activity, or 24 percent of the Nation's total. The sector provided jobs for over 18 million workers, almost 23 percent of all civilian employment.

Total final consumption (GNP) in 1967 was \$795.4 billion. Food and fiber's share was \$169.2 billion, or slightly over 20 percent. This figure includes consumer spending of \$158.2 billion for food and beverages, clothing and shoes, tobacco, and horticultural products. Another \$11 billion was added by exports, Government purchases, and net inventory change.

To produce the \$169.2 billion required supporting domestic and foreign business activity valued at \$194.4 billion for a total of \$363.6 billion. Of this, \$160.9 billion was GNP originating in the food and fiber sector—wages, indirect business taxes, and property-type income (business income, depreciation, and net interest); \$194.2 billion, intermediate goods purchased within the economy; and \$8.5 billion, imports.

The three components of GNP identified were employee compensation, indirect business taxes, and property-type income. The food and fiber sector typically earns proportionately less of its income from employee compensation and more as property-type income, and pays a

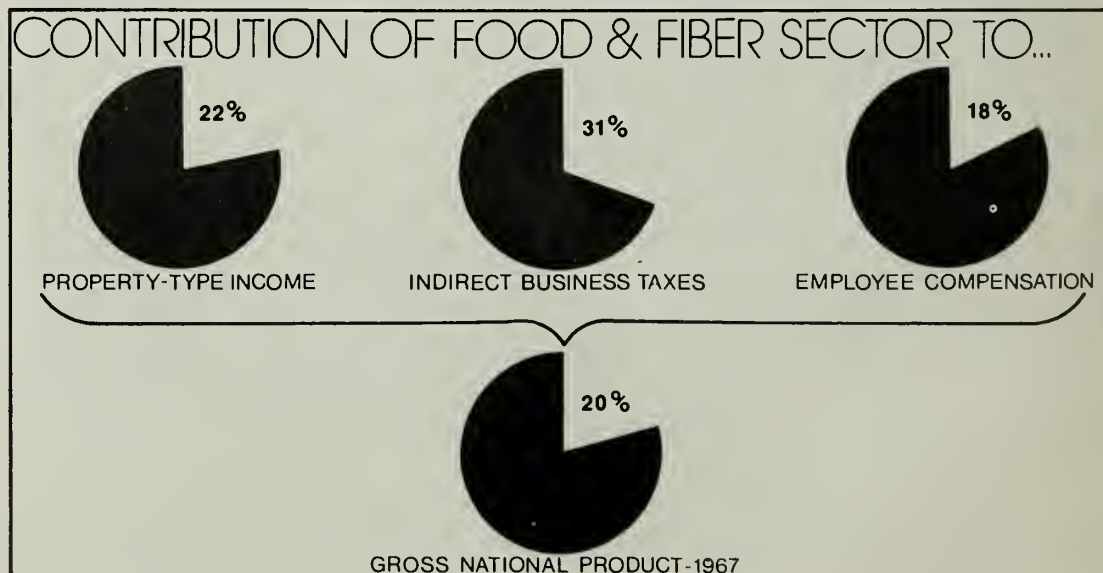
larger share of indirect business taxes. In general this is because of a higher incidence of property and sales taxes on this sector and a

higher proportion of self-employed and unpaid family labor.

[Based on special material by Gerald E. Schluter, National Economic Analysis Division.]

FOOD AND FIBER SECTOR AND TOTAL U.S. ECONOMY

Subsector	Gross National Product originating in sector	Intermediate inputs	Total business activity	Civilian employment
	<i>Billion dollars</i>			<i>Millions</i>
Farm	18.9	32.2	51.1	3.3
Food processing	22.5	61.2	83.7	1.7
Textiles and apparel manufacturing	11.9	23.0	34.9	1.9
Other manufacturing	21.7	31.9	53.6	1.7
Resource based industries and services	27.6	21.5	49.1	1.8
Trade and transportation	58.3	24.4	82.7	7.7
Imports	—	8.5	8.5	—
Total food and fiber	160.9	202.7	363.6	18.1
U.S. Economy	795.4	725.1	1,520.5	78.9



Stalking the Celery Scene Shows Farm Value At \$100 Million

What started out as a wild plant with bitter, poisonous juices has become—in cultivated form—one of the Nation's best-selling vegetables.

A member of the carrot family and related to the less popular parsley and parsnip, celery last year had a farm value of more than \$100 million.

It ranked fifth in dollar value among all fresh vegetables—behind only lettuce, tomatoes, onions, and cabbage.

Commercial production—90 percent of it in California and Florida—totaled some 17 million pounds last year, nearly a fourth more than in 1964. California produces 63 percent of our celery, up from 54 percent in 1964 and accounting for all of the national increase in production.

Retail prices over the past 10 years have gone up more than 50 percent, averaging 24 cents a pound last year.

During this same time, the grower's share of the retail price remained fairly stable, averaging 12 percent for the past 10 years, as did transportation costs, which averaged 15 percent. Harvesting, packing, and

selling costs declined slightly and averaged 17 percent, and the wholesaler's and retailer's share increased slightly averaging 56 percent of the retail value for the 10-year period.

In California, the cost for producing a crate of celery averaged \$1 last year, or about 60 percent more than in 1964. Labor was the largest single cost, running about a fourth of the total. Seeds and plants cost 18 cents per crate, and fertilizer, 16 cents.

[Based on an article in the *Vegetable Situation*, TVS-192, April 1974, entitled "Celery Prices, Costs, and Margins" by Alfred J. Burns, Joseph C. Podany, and N. A. Wynn, Commodity Economics Division.]

Recent Publications

World Food: Prices and the Poor. Lyle P. Schertz, Deputy Administrator, Resource and Development Economics, Economic Research Service. Reprinted from *Foreign Affairs*.

This article examines the problems faced by less developed nations in feeding their people in light of the recent unstable conditions in international food markets. Major topics include the burgeoning prices for fertilizer and energy inputs, rapidly shrinking grain stocks in the United States, the influence of important domestic markets on world food markets, and the impact of all these factors on future world food situation.

Handbook of Agricultural Charts, 1974 Spring Supplement. Supplement for 1973 Handbook of Agricultural Charts.

Up-to-date charts on the general domestic situation, farms, livestock and products, crops, and foreign trade are presented in this supplement to the *1973 Handbook of Agricultural Charts*.

Prospects for Agricultural Trade With the U.S.S.R. ERS-For. 356.

Last fall, ERS sponsored a seminar of Government and university

Single copies of the publications listed here are available free from The Farm Index, Economic Research Service, Rm. 1459-So., U.S. Department of Agriculture, Washington, D.C. 20250. However, publications indicated by () may be obtained only by writing to the experiment station or university. For addresses, see July and December issues of The Farm Index.*

specialists to discuss the longer term prospects for exports of agricultural commodities to the U.S.S.R. This report contains the four papers presented at the seminar: "Soviet Economic Growth and Consumer Welfare: Retrospect and Prospect," "U.S.S.R. Hard Currency Balance of Payments," "The Soviet Feed-Livestock Economy: Preliminary Findings on Performance and Trade Implications," and "Soviet Agriculture and World Trade in Farm Products."

Indices of Agricultural Production for the Western Hemisphere Excluding the United States and Cuba, 1964 Through 1973. Foreign Demand and Competi-

tion Division. ERS-For. 264. Revised May 1974.

In 31 tables, ERS reports on agricultural production in the Western Hemisphere, including a country-by-country breakdown of production by commodity, value, and indices of total agricultural and food production, average 1961-65 and annual 1964-73.

Developments in Marketing Spreads for Agricultural Products in 1973. Economic Research Service. ERS-14 (1974).

Food prices rose at the most rapid rate in over a quarter of a century last year, and this report looks at that picture, from the retail cost of a market basket of farm foods, to the farmer's share of the food dollar, to cost and profit components of leading food products.

State Programs for the Differential Assessment of Farm and Open Space Land. Thomas F. Hady and Ann Gordon Sibold, Economic Development Division. AER-256.

This bulletin updates a previous report, *Taxation of Farmland on the Rural-Urban Fringe* (AER-119). It analyzes the major types and the effects of differential tax assessment laws enacted to preserve open space

or to reduce property taxes on farmland. Also provided are summaries of the differential assessment programs in each of the 31 States which have them.

Consumers' Preferences, Uses and Buying Practices for Selected Vegetables: A Nationwide Survey. Jon Weimer and Patricia Stevens, National Economic Analysis Division. MRR-1019.

When we choose our vegetables, nutrition sometimes takes a back seat to taste, and our taste buds have so far made corn, white potatoes, and tomatoes our most popular vegetables. These and other consumer opinions affecting the purchase and use of various fresh, canned, or frozen vegetables are discussed in this report. Opinions on labeling, product improvement, and proposed new products are also explored.

Southwest Cattle Ranches: Organization, Costs, and Returns, 1964-72. Wylie D. Goodsell and Macie J. Belfield, Commodity Economics Division, and James R. Gray, New Mexico State University. AER-255.

This is the final report in a series describing the financial picture of ranching in the Southwest, one of the most important beef calf producing areas in the U.S. Analyzed in detail are the ranchers' production practices and costs, investment patterns, capital appreciation, sales, and returns. The influence of geography and weather on the ranching business is also discussed.

Iran: Agricultural Production and Trade. Michael E. Kurtzig, Foreign Demand and Competition Division. ERS-For. 357.

Agriculture still employs the largest share of the labor force in Iran although its share of the GNP continues to decline. This report looks into agriculture's role in Iran's economy and its prospects.

Estimating the Income Supplement in Farm Program Payments. Thomas A. Miller, Commodity Economics Division, in cooperation with Colorado

State University. Tech. Bull. 1492.

The direct Government payments made to farmers under the Agricultural Act of 1970 are designed to encourage needed production adjustments and to supplement farm income. This report develops a conceptual model and uses it to estimate the income supplement share in 1972 farm program payments for wheat, feed grains, and cotton. The results may offer some clues to possible revisions in the farm program structure to better accomplish its goals.

U.S. Peach Industry, Part 2. An Interregional Competitive Model for Canned Peaches. Yvonne Davies, Agricultural Research Service, and Warren Trotter, Commodity Economics Division, both stationed at Richard B. Russell Agricultural Research Center. AER-253.

Interregional competition in growing and canning peaches is the focus of this second report of a two-part study. Regional production and trade patterns which minimize total costs of producing, processing, transporting, and distributing the national pack of canned peaches are determined under various assumed competitive situations. The U.S. is divided into eight consumption and four production regions to facilitate this analysis. Particular emphasis is given to the economic potential of the Southeast.

Income of Farm Wagerworker Households in 1971. Gene A. Rowe and Leslie Whitener Smith, Economic Development Division. AER-251.

This report presents information on the size, composition, and family income of 1971's farm waggerworker households by type of workers. Any household that contained at least one person 14 years of age or over who performed farm waggerwork at any time during the year, even if for only 1 day, is included in the study.

The Value-Added Tax and American Agriculture. W. Fred Woods, National Economic Analysis Division. ERS-540.

The purpose of this report is to

examine the value-added tax, its characteristics, and the administration of it, and to make a preliminary analysis of the effects of a value added tax on the agricultural sector.

Tax Loss Farming. Thomas A. Carlin and W. Fred Woods, National Economic Analysis Division. ERS-546.

About 43 percent of the 2.9 million U.S. individuals filing farm tax returns in 1970 reported losses—nearly 1.3 million individuals. An analysis of these farm loss returns suggests that "tax loss" farmers who invest in agriculture to shelter nonfarm earnings are not typical in U.S. agriculture, but neither are they a rarity.

Recycling Poultry Waste as Feed: Will It Pay? R. Gar Forsht, Clark R. Burbee, and William M. Crosswhite, Natural Resource Economics Division. AER-254.

This report expands on an earlier study—*Recycling Animal Wastes as Feed*—and compares the costs and returns of feeding processed poultry wastes to livestock and poultry with the costs and returns of other feed formulas. Cost analyses are also made for alternative poultry waste management systems, such as composting, incineration, oxidation ditch treatment, and land disposal.

Prices, Costs and Margins of Florida Oranges—Fresh and Processed. Alfred J. Burns and Joseph C. Podany, Commodity Economics Division. ERS-249.

This article, reprinted from the February *Fruit Situation* published by ERS, focuses on growers' returns over the past 8 years for oranges for the fresh market and for processing.

Periodicals: 1974. Prepared by the Divisions of Information of the Economic Research Service and the Statistical Reporting Service.

This catalog briefly describes the content of periodic reports of agricultural statistics and economics published by USDA and tells how to order them. Calendars of release dates are also provided.

Economic Trends

Item	Unit or Base Period	1967	Year	1973			1974
				Feb.	Dec.	Jan.	Feb.
Prices:							
Prices received by farmers	1967=100	—	172	149	184	200	203
Crops	1967=100	—	164	133	193	211	223
Livestock and products	1967=100	—	178	161	178	192	190
Prices paid, interest, taxes and wage rates	1967=100	—	145	136	154	157	159
Family living items	1967=100	—	138	131	147	149	153
Production items	1967=100	—	146	134	156	161	161
Ratio ¹	1967=100	—	118	110	119	127	128
Wholesale prices, all commodities	1967=100	—	135.5	126.9	145.3	150.4	152.7
Industrial commodities	1967=100	—	127.0	121.3	137.1	140.5	142.5
Farm products	1967=100	—	176.3	150.9	187.2	202.6	205.6
Processed foods and feeds	1967=100	—	148.1	137.0	155.7	162.1	164.7
Consumer price index, all items	1967=100	—	133.1	128.6	138.5	139.7	141.5
Food	1967=100	—	141.4	131.1	151.3	153.7	157.6
Farm Food Market Basket: ²							
Retail cost	1967=100	—	142.3	130.4	152.7	155.5	160.3
Farm value	1967=100	—	167.0	147.6	173.6	184.6	189.8
Farm-retail spread	1967=100	—	126.6	119.5	139.5	137.0	141.6
Farmers' share of retail cost	Percent	—	46	44	44	46	46
Farm Income: ³							
Volume of farm marketings	1967=100	—	110	88	130	135	89
Cash receipts from farm marketings	Million dollars	42,693	83,449	4,881	8,386	9,276	6,400
Crops	Million dollars	18,434	38,172	1,628	4,815	5,050	2,700
Livestock and products	Million dollars	24,259	45,277	3,253	3,571	4,226	3,700
Realized gross income ⁴	Billion dollars	49.0	90.5	—	108.3	—	—
Farm production expenses ⁴	Billion dollars	34.8	64.4	—	77.9	—	—
Realized net income ⁴	Billion dollars	14.2	26.1	—	30.4	—	—
Agricultural Trade:							
Agricultural exports	Million dollars	—	9,404	1,182	1,976	1,839	1,918
Agricultural imports	Million dollars	—	6,459	615	759	787	819
Land Values:							
Average value per acre	Dollars	⁶ 168	⁷ 219	—	—	—	⁸ 247
Total value of farm real estate	Billion dollars	⁶ 181.9	⁷ 230.5	—	—	—	⁸ 258.7
Gross National Product: ⁴							
Consumption	Billion dollars	793.9	1,289.1	—	1,337.5	—	—
Investment	Billion dollars	492.1	8,040	—	825.2	—	—
Government expenditures	Billion dollars	116.6	202.1	—	213.9	—	—
Net exports	Billion dollars	180.1	277.1	—	285.6	—	—
Income and Spending: ⁵							
Personal income, annual rate	Billion dollars	629.3	1,035.4	997.4	1,089.0	1,087.0	1,094.8
Total retail sales, monthly rate	Million dollars	26,151	41,943	41,242	42,116	42,932	43,034
Retail sales of food group, monthly rate	Million dollars	5,759	8,811	8,409	9,264	9,551	9,612
Employment and Wages: ⁵							
Total civilian employment	Millions	74.4	⁹ 84.4	⁹ 83.2	⁹ 85.7	⁹ 85.8	⁹ 85.8
Agricultural	Millions	3.8	⁹ 3.5	⁹ 3.4	⁹ 3.6	⁹ 3.8	⁹ 3.9
Rate of unemployment	Percent	3.8	4.9	5.1	4.8	5.2	5.2
Workweek in manufacturing	Hours	40.6	40.7	40.6	40.7	40.3	40.5
Hourly earnings in manufacturing, unadjusted	Dollars	2.83	4.07	3.97	4.21	4.21	4.21
Industrial Production: ⁵							
	1967 = 100	—	126	123	127	126	124
Manufacturers' Shipments and Inventories: ⁵							
Total shipments, monthly rate	Million dollars	46,449	72,193	69,245	75,355	77,187	77,879
Total inventories, book value end of month	Million dollars	84,655	120,870	109,082	120,870	122,570	124,831
Total new orders, monthly rate	Million dollars	46,763	74,636	71,022	76,811	79,077	80,017

¹ Ratio of index of prices received by farmers to index of prices paid, interest, taxes, and farm wage rates. ² Average annual quantities of farm food products purchased by urban wage earner and clerical worker households (including those of single workers living alone) in 1959-61—estimated monthly. ³ Annual and quarterly data are on 50-State basis. ⁴ Annual rates seasonally adjusted fourth quarter. ⁵ Seasonally adjusted. ⁶ As of March 1, 1967. ⁷ As of March 1, 1972. ⁸ As of March 1, 1973. ⁹ Beginning January 1972 data not strictly comparable with prior data because of adjustment to 1970 Census data.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Monthly Retail Trade Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

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